

REMARKS

Claims 1-5, 7, 8, 43-45, 49, and 50 are pending. Claims 1, 44, and 49 are independent claims. No claims stand allowed.

To continue the prosecution after the final Office Action, a RCE is submitted herewith.

In the final Office Action, the Examiner rejected independent claim 1 under 103(a) as being obvious over Kudrle (US 2002/0146200) in view of Karpman (2004/0119143). It is respectfully submitted that claim 1 as presently presented is not disclosed or suggested by Kudrle or Karpman or the combination thereof.

Claim 1 now expressly recites, among other features, the package for the microelectromechanical array device, the package comprising the ceramic package substrate; the discontinuous insert substrate that is disposed between the semiconductor substrate and the ceramic package substrate; and wherein the discontinuous insert substrate has a CTE value that is the same as a CTE value of the semiconductor substrate or between the value of the semiconductor substrate and a CTE value of the package substrate. This combination of features, including the discontinuous insert substrate, is not disclosed or suggested by Kudrle. One example, of many possible examples covered by the claim, of the discontinuous insert substrate is illustrated in Fig. 6d. Using a discontinuous substrate insert (e.g. a single substrate having an aperture(s) or multiple discrete insert portions) has been found to work better than a continuous substrate insert (see other embodiments in the application), and is, in fact, the preferred embodiment and the current design presently being used by applicant.

In contrast, Kudrle discloses, for example in FIG. 23C, a MEMS die, a ceramic substrate, and a metal heat sink. However, Kudrle does not disclose or suggest the ceramic package substrate, or the feature of a discontinuous insert substrate and that has a CTE value that is the same as a CTE value of the semiconductor substrate or between the value of the semiconductor substrate and a CTE value of the package substrate, as recited in claim 1. Karpman does not remedy the deficiency of Kudrle. Specifically, Karpman does not disclose or suggest the discontinuous insert substrate. Instead, isolator 24 (or plate 26) as shown in FIG. 2 is a continuous plate. Taking Kudrle alone or together with Karpman, it is submitted that it would not be obvious to modify the insert substrate of Kudrle to make it discontinuous (nor does Kudrle (or Kudrle and Karpman) suggest the benefits inherent in making the insert substrate discontinuous).

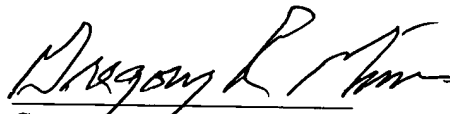
Since neither Kudrle nor Karpman, or the combination thereof does not disclose or suggest the combination of the features in claim 1, claim 1, as well as claims 2-5, 7, 8, and 43 that are dependent from claim 1, is patentable over Kudrle and Karpman.

Independent claims 44 and 49 recite a combination of features, including the above-noted feature of

the discontinuous substrate insert. Claims 44 and 49 likewise recite allowable subject matter for the same reasons noted above with respect to claim 1. Since neither Kudrle nor Karpman, or the combination thereof does not disclose or suggest the combination of the features in claim 44 or claim 49, claims 44 and 49, as well as claim 45 that is dependent from claim 44, and claim 50 that is dependent from claim 49, are patentable over Kudrle and Karpman.

This application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. In the event any fees are required in connection with this paper, please charge our Deposit Account No. 501516.

Respectfully submitted,



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